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CONNECT2AIR™ WLAN AP-600RP-USB Configuration schemes

Category: CONNECT2AIR WLAN **Content: Config. schemes**

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1. Introduction

The AP-600RP-USB offers a wide range of configuration possibilities due to the extended feature set. This paper helps you to manage more complex configuration schemes and helps you in configuring your AccessPoint as well as other devices in the network, like ADSL Routers.

Novices and Professionals will find appropriate information, depending on their knowledge. You will find an overview on how the configuration should like. Compare it with your settings and adopt it. No step-by-step installation is provided with this paper, so please consult the manual provided with the product or download it from http://www.driver-cd.com → Accessories → Wireless LAN → AP-600RP-USB

Important: Before starting with configuring your device, please make sure that you download the latest Firmware from the support homepage: from http://www.driver-cd.com → Accessories → Wireless LAN → AP-600RP-USB

2. WLAN Security

To protect your intellectual property, secure your wireless connection! This AccessPoint is equipped with a sophisticated security algorithm to protect against intruders entering your system or listening to what you are transferring over your network.

It is highly recommended to have at least Wired Equivalent Privacy (WEP) with 128 bit enabled. Refer to the manual in order to get information about how to secure your WLAN or visit http://www.fujitsu-siemens.com/mobility .

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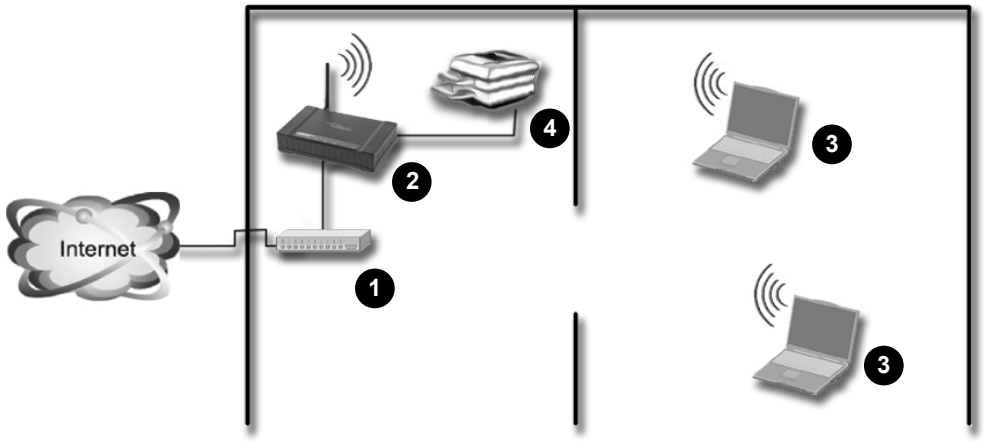
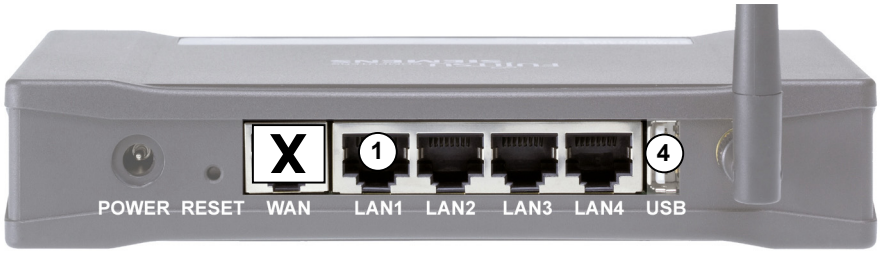
3. AP-600RP-USB with ADSL Router



(1) ADSL Router		(2) AP-600RP-USB		(3) Notebook	
WAN:	PPPoE over ADSL	WAN:	no ISP	TCP/IP:	get IP and DNS address automatically
LAN:	static IP: 192.168.1.1	LAN:	static IP: 192.168.1.254	SSID:	CONNECT2AIR
DHCP	on: 192.168.1.10 - 90 GW: 192.168.1.1 DNS: auto	DHCP Routing:	disabled off (cable from Router connected to the LAN interface)	Data Rate:	auto
		SSID:	CONNECT2AIR		

Connecting the devices to the AP-600RP-USB:



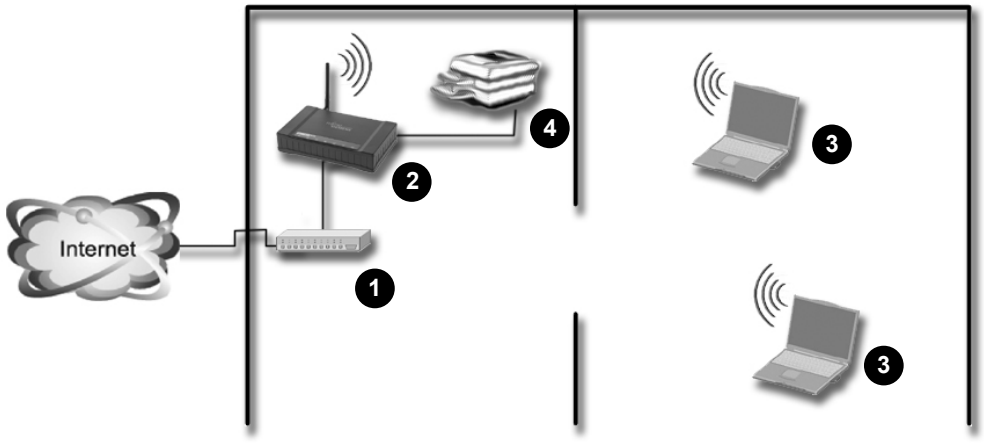
Connect the ADSL Router to one of the LAN port, not to the WAN port. Additional networking devices like network printers, servers or scanners can be plugged to one of the free LAN ports and will be integrated in the IP segment of 192.168.1.X.

Installation Note

The AccessPoint as well as the ADSL Router have routing capabilities. Therefore it is suggested to operate the AccessPoint only as a Wireless Bridge. Connecting the ADSL Router to one of the LAN ports will put the AccessPoint into the bridging mode. The network management will therefore be handled by the ADSL Router.

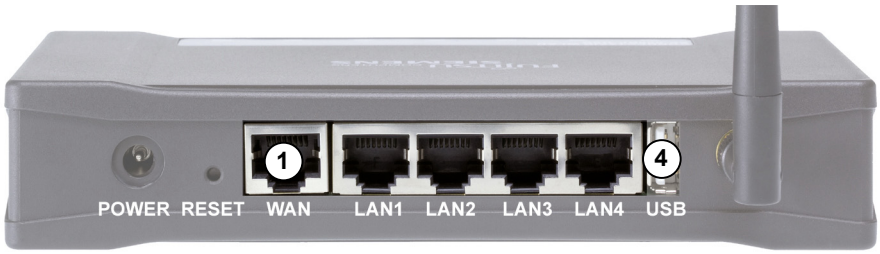
ADSL Router:	**AP-600RP-USB:**
- DHCP Server - managing the PPPoE session	- handling the wireless LAN (WLAN) access

4. AP-600RP-USB with ADSL Router advanced



(1) ADSL Router		(2) AP-600RP-USB		(3) Notebook	
WAN:	PPPoE over ADSL	WAN:	dynamic IP address	TCP/IP:	get IP and DNS address automatically
LAN:	static IP: 192.168.**1**.1	LAN:	static IP: 192.168.**4**.254	SSID:	CONNECT2AIR
DHCP	on: 192.168.**1**.10 - 90	DHCP	on: 192.168.**4**.10 - 90	Data Rate:	auto
	GW: 192.168.**1**.1		GW: 192.168.**4**.254		
	DNS: auto		DNS: auto		
		Routing:	on (cable from Router connected to the WAN interface)		
		SSID:	CONNECT2AIR		

Connecting the devices to the AP-600RP-USB:

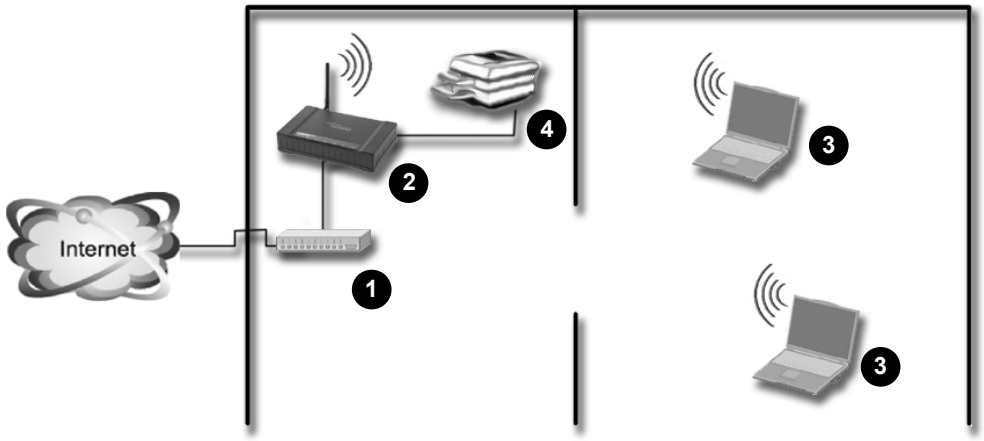


Installation Note

Both the AccessPoint as well as the ADSL Router have routing capabilities. This case describes using both devices in the router mode in order to have the full feature set of the AccessPoint active, like the Firewall, NAT or the packet forwarding service.
Important: The IP segment of the ADSL Router has to be different from the one of the AccessPoint, otherwise the APs Router will not work properly. Due to production process, the third IP segment of the AccessPoint must be different to 192.168.**2**.X, as the default WAN settings for “static IP address” is set to 192.168.2.1 .

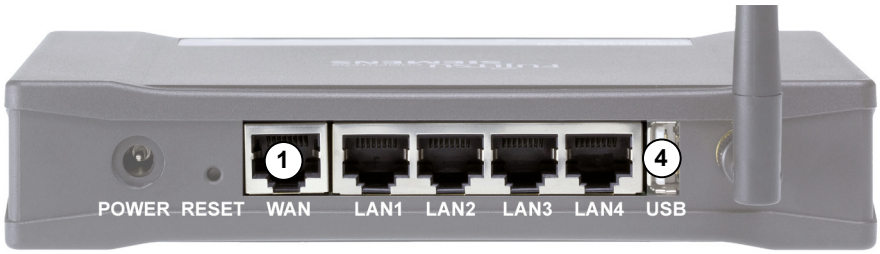
ADSL Router:	**AP-600RP-USB:**
- DHCP Server (on or off)	- DHCP Server
- managing the PPPoE session	- handling the wireless LAN (WLAN) access
	- NAT Routing, Firewall are active

5. AP-600RP-USB with ADSL Modem



(1) ADSL Modem	(2) AP-600RP-USB	(3) Notebook
No configuration necessary	WAN: PPP over Ethernet LAN: static IP: 192.168.1.254 DHCP on: 192.168.1.10 - 90 GW: 192.168.1.254 DNS: auto SSID: CONNECT2AIR	TCP/IP: get IP and DNS address automatically SSID: CONNECT2AIR Data Rate: auto

Connecting the devices to the AP-600RP-USB:



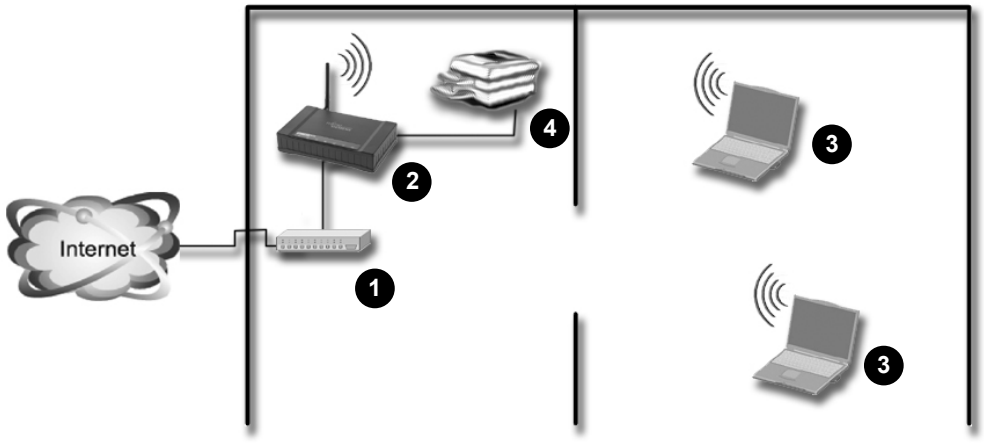
Connect the ADSL Modem to the WAN port, otherwise the PPPoE session cannot be established and therefore the Internet service cannot be opened. Additional networking devices like network printers, servers or scanners can be plugged to one of the free LAN ports and will be integrated in the IP segment of 192.168.1.X.

Installation Note

Most broadband Internet connections are nowadays established over an ADSL Modem. This case describes using an ADSL modem in connection to the WLAN AccessPoint. The configuration is quite easy and allows you to share one single Internet connection with several other Clients.

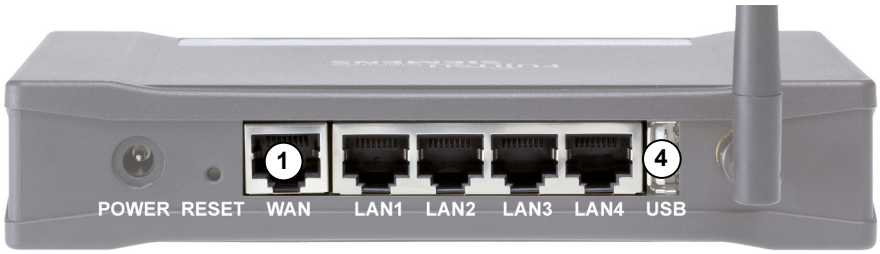
Important: Please check thoroughly if you do have a Modem or a Router, due to the complete different configuration.

6. AP-600RP-USB with CABLE Modem



(1) Cable Modem	(2) AP-600RP-USB	(3) Notebook
The Cable Modem does not have to be configured.	WAN: dynamic IP address LAN: static IP: 192.168.1.254 DHCP on: 192.168.1.10 - 90 GW: 192.168.1.254 DNS: auto Routing: on (cable from Modem connected to the WAN interface) SSID: CONNECT2AIR	TCP/IP: get IP and DNS address automatically SSID: CONNECT2AIR Data Rate: auto

Connecting the devices to the AP-600RP-USB:



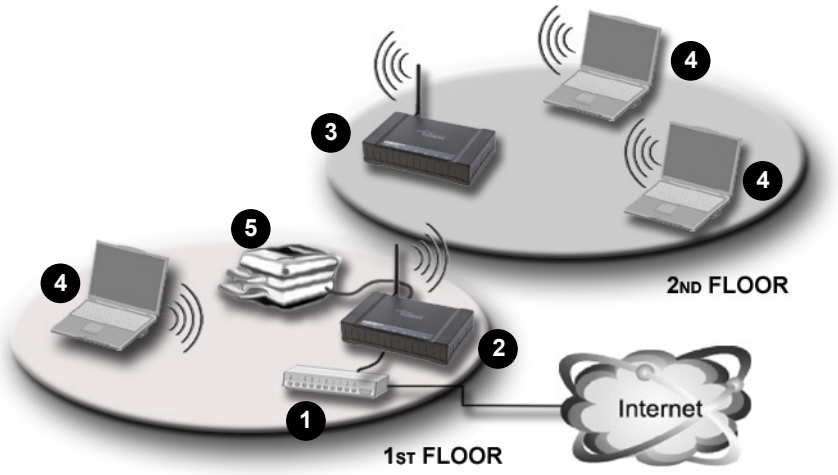
Connect the CABLE Modem to the WAN port. Additional networking devices like network printers, servers or scanners can be plugged to one of the free LAN ports and will be integrated in the IP segment of 192.168.1.X.

Installation Note

Beside ADSL, most broadband Internet connections are nowadays established over CABLE Modem (TV cabling). This case describes using an CABLE modem in connection to the WLAN AccessPoint. The configuration is quite easy and allows you to share one single Internet connection with several other Clients.

CABLE Modem:	**AP-600RP-USB:**
- establishing Internet connection	- DHCP Server - handling the wireless LAN (WLAN) access - NAT Routing, Firewall are active

7. Two AP-600RP-USB in repetition mode (WDS)



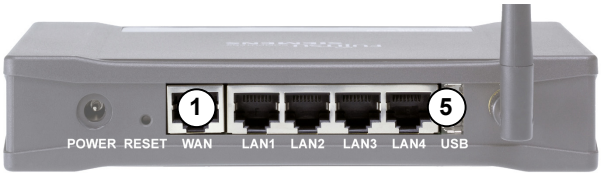
(2) AP-600RP-USB Floor 1	
WAN:	PPP over Ethernet
LAN:	static IP: 192.168.1.254 subnet Mask: 255.255.255.0
DHCP	on: 192.168.1.10 - 90 GW: 192.168.1.254 DNS: auto
SSID:	CONNECT2AIR
Channel:	11 (same as AP 2)
WDS:	MAC addr. of AP-600RP-USB 2 listed in the table

(3) AP-600RP-USB Floor 2	
WAN:	no ISP
LAN:	static IP: 192.168.1.**253** subnet Mask: 255.255.255.0 GW: 192.168.1.254
DHCP	disabled
SSID:	CONNECT2AIR
Channel:	11 (same as AP 1)
WDS:	MAC addr. of AP-600RP-USB 1 listed in the table

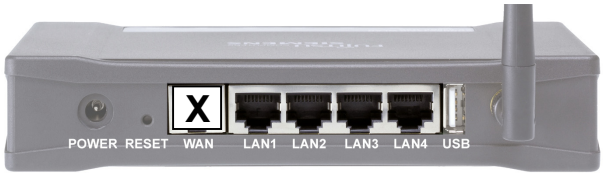
(4) Notebook	
TCP/IP:	get IP and DNS address automatically
SSID:	CONNECT2AIR
Data Rate:	auto

The ADSL Modem (1) does not have to be configured.

Connecting the devices to the AP-600RP-USB:



AP-600RP-USB Floor 1



AP-600RP-USB Floor 2

Connect the ADSL Modem to the WAN port of the AP1, otherwise the PPPoE session cannot be established and therefore the Internet service cannot be opened. Additional networking devices like network printers, servers or scanners can be plugged to one of the free LAN ports of the AP1 or AP2 and will be integrated in the IP segment of 192.168.1.X.

Installation Note

In order to have more range up to 6 AccessPoints can be linked together. This case describes the configuration of linking two APs together whereas AP1 is the managing one, which initiates the PPPoE session and acts as DHCP server. The SSID and the radio channel must be equal for all APs linked, otherwise no connection can be established. Furthermore every AP has to know its counterpart, therefore a MAC address table is provided to enter the appropriate AccessPoint.

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VP MS WLAN
http://www.fujitsu-siemens.com/wireless

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